

**FRV WALTHER HERWIG III**

**Cruise 308 (IBTS-Q1)**

**17.01. – 16.02.2008**

**REPORT**

Scientist in charge: Dr. G. Wegner

**Objective**

Participation in the ICES co-ordinated 'International Bottom Trawl Survey' 2008, 1<sup>st</sup> quarter, in the North Sea.

The objective of the survey is to estimate the strength of the upcoming year classes of the demersal fish species cod, haddock, whiting and Norway Pout as well as of the pelagic species herring, sprat and mackerel. In addition, the distribution and abundance of herring larvae are to be investigated. Temperature, salinity, and nutrients in the area of investigation are monitored.

**Narrative**

Time schedule

17.01.2008 (15:30)	Departure Bremerhaven,
17.01. – 31.01.	Sampling / fishing (German Bight, central and north-western North Sea)
31.01. (11:00) – 03.02. (13:00)	Break in Lerwick, Shetland (extended due to storm)
03.02. – 15.02	Sampling / fishing (northern North Sea and German Bight)
15.02.2008 (09:00)	Arrival Bremerhaven

According to the international ICES program coordinated by the Netherlands' Institute for Marine Resources and Ecosystem Studies (IMARES) the rectangles assigned to Germany in the northern and central North Sea were to be fished by means of the ICES standard bottom trawl GOV during daytime and the standard plankton MIK (Methot-Isaac-Kidd) net during nighttime. Additionally, temperature and salinity measurements and nutrient samples were to be taken in each rectangle. Due to the rough weather conditions, WALTHER HERWIG was able to fish only in 63 of the 75 rectangles assigned (Fig 1). In total, 129 MIK and 63 GOV hauls as well as 62 CTD profiles were conducted.

## **Results**

Total catches of the GOV hauls (Fig. 2) were between 10 and 1500 kg, within the same magnitude than during the years before. Compared with the previous year, larger numbers of juvenile herring, mackerel, cod, whiting and Norway pout were caught by "Walther Herwig III" this year, while young haddock and sprat appeared to be less. Sprat was caught only in the German Bight, most of the young herring too.

Compared to previous years the mean abundance index of herring larvae caught with the MIK net is similar but the distribution pattern is more extended to the north-east. Higher abundances were found in the central and northern parts of the North Sea, especially in the Moray Firth.

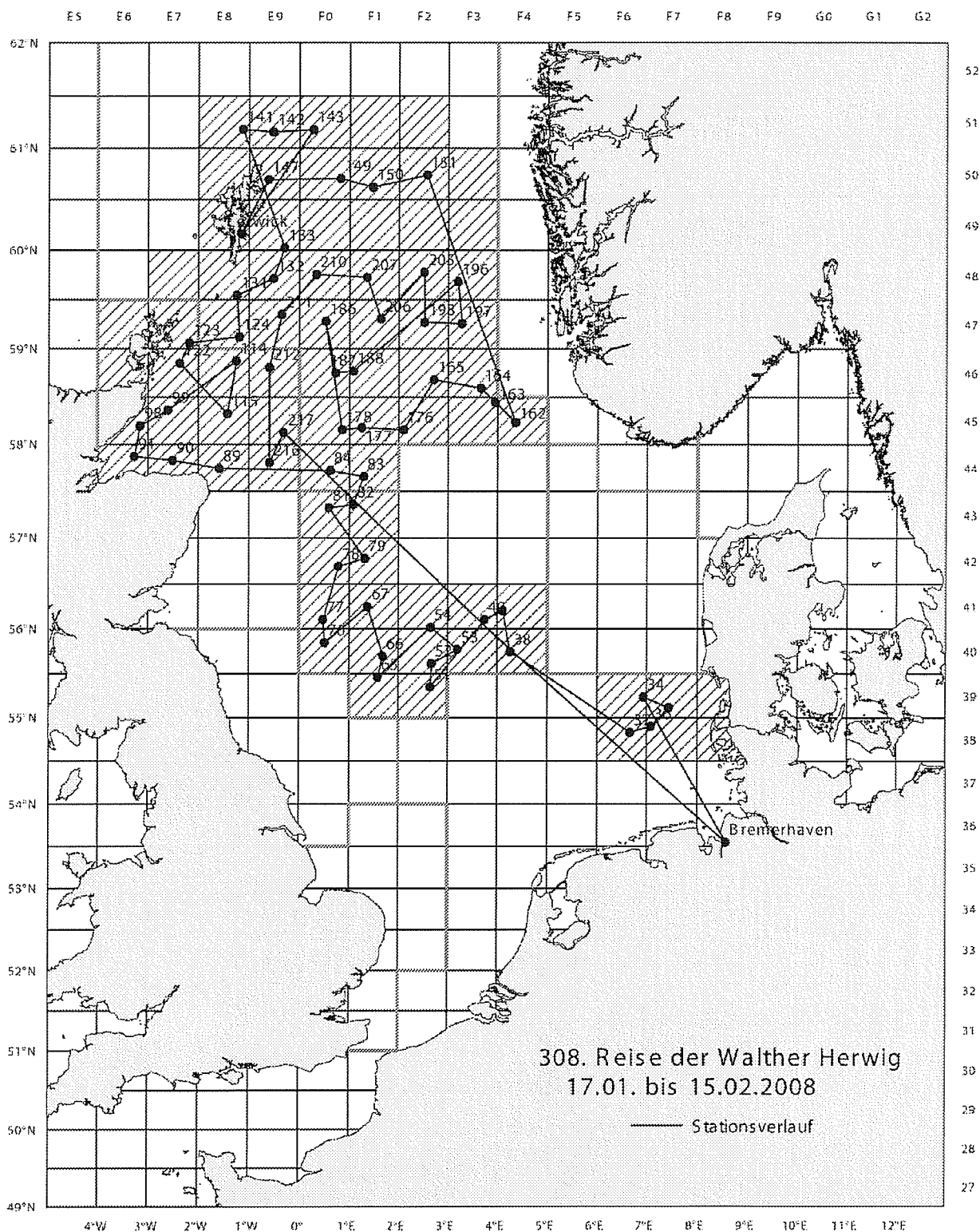
The distribution area as well as the abundance of snake pipefish caught with the MIK was comparable to the previous year.

Sea surface temperatures in the investigation area were between 6.5 to 9.5°C (mean 7.7°C). Originating from the Norwegian Coastal Current, some thermal and haline stratification was found in the north-eastern squares. Slight vertical differences in temperature and salinity occurred in the Scottish coastal waters. Oxygen saturation was found in all depths.

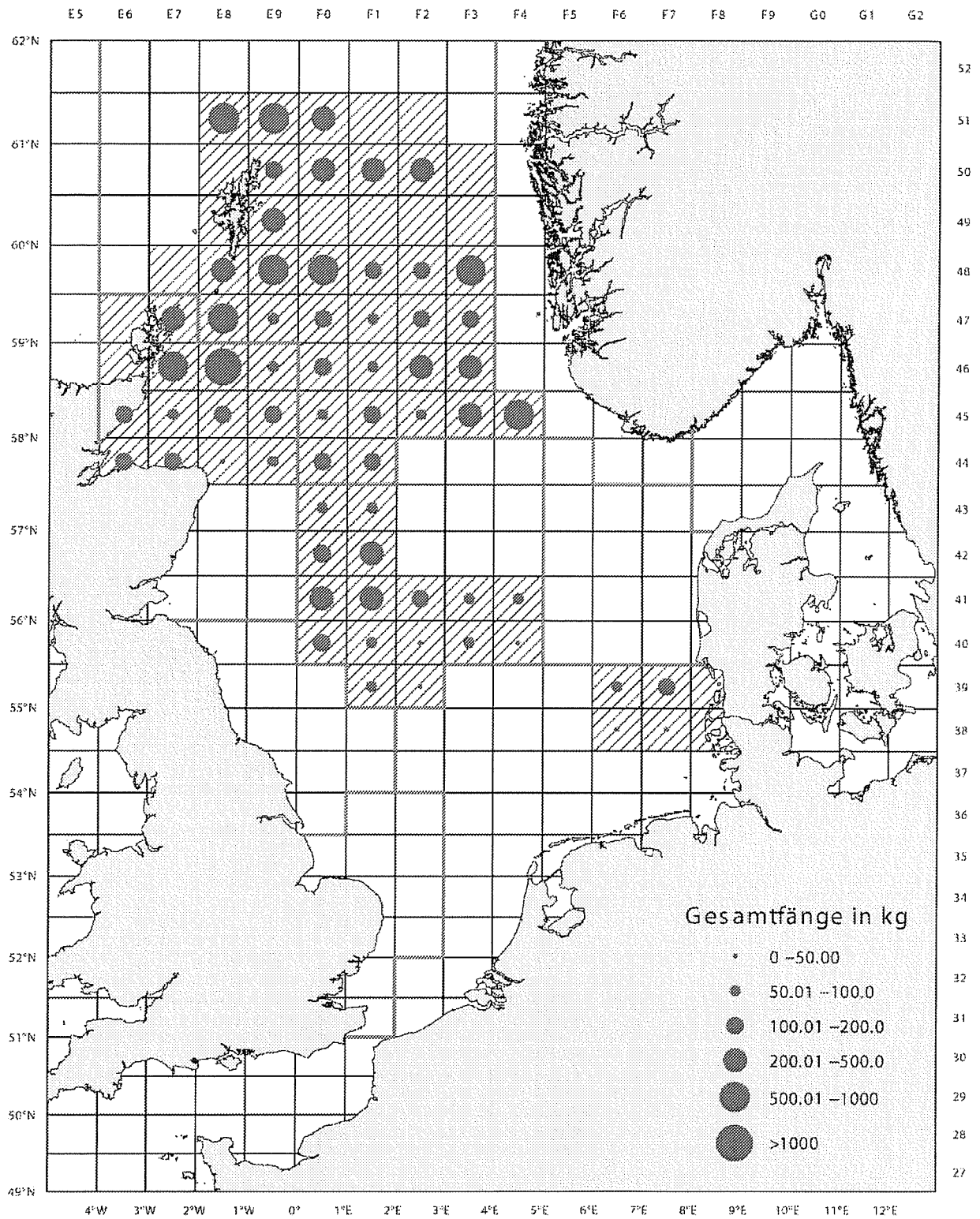
## **Participants**

<b>Name</b>	<b>Function</b>	<b>Institution</b>
Annika Elsheimer	Fishery biology	vTI, Institute of Sea Fisheries, Hamburg (SF)
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Thomas Groß	Plankton	vTI, SF
Gitta Hemken	Fishery biology	vTI, SF
Petra Jantschik	Fishery biology	vTI, SF
Dr. Matthias Kloppmann	Plankton	vTI, SF
Daniel Oesterwind	Fishery bio., cephalo.	IFM-GEOMAR, Kiel
Sergej Schachray	Fishery biology	vTI, SF
Dr. Gerd Wegner	Hydrogr., chief scient.	TI, SF
Ingo Wilhelms	Fishery bio., data proc.	vTI, SF

Dr. Gerd Wegner



**Fig.1: Fishing hauls and plankton stations carried out in the investigation area  
IBTS 1<sup>st</sup> quarter 2008, cruise 308 of FRV "Walther Herwig III",**



**Fig. 2: Total catches during cruise 308 of FRV "Walth"**